## ABSTRACT

The present invention relates to an electric power generator and its operation method, which electric power generator is equipped with a hydrogen generator, a polymer electrolyte fuel cell for generating electric power using hydrogen rich gas from the hydrogen generator, a burner for burning the hydrogen generator, a flow rate controller for controlling the supply amount of a burning fuel to the burner, a communicating pathway connecting the flow rate controller and the burner, a joint where at least a residual fuel gas from a fuel electrode of the fuel cell and/or an incompletely generated gas from the hydrogen generator are combined into the communicating pathway, and a pressure-transferring pipe for releasing the pressure between the joint and the flow rate controller into the flow rate controller; the electric power generator being characterized in that the flow rate controller controls the supply amount of the burning fuel on the basis of the above-mentioned pressure.